

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PA136158/PCT	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/IB2005/000061	International filing date (day/month/year) 13.01.2005	Priority date (day/month/year) 15.01.2004	

International Patent Classification (IPC) or national classification and IPC
INV. C09K3/14

Applicant
ELEMENT SIX LIMITED et al.

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

- a. sent to the applicant and to the International Bureau a total of sheets, as follows:
 sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- Box No. I Basis of the report
 Box No. II Priority
 Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 Box No. IV Lack of unity of invention
 Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 Box No. VI Certain documents cited
 Box No. VII Certain defects in the international application
 Box No. VIII Certain observations on the international application

Date of submission of the demand

11.11.2005

Date of completion of this report

10.05.2006

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**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IB2005/000061

Box No. I Basis of the report

1. With regard to the **language**, this report is based on

 - the international application in the language in which it was filed
 - a translation of the international application into , which is the language of a translation furnished for the purposes of:
 - international search (under Rules 12.3(a) and 23.1(b))
 - publication of the international application (under Rule 12.4(a))
 - international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-8 as originally filed

Claims, Numbers

1-11 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. The amendments have resulted in the cancellation of:
 the description, pages
 the claims, Nos.
 the drawings, sheets/figs
 the sequence listing (*specify*):
 any table(s) related to sequence listing (*specify*):

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 the description, pages
 the claims, Nos.
 the drawings, sheets/figs
 the sequence listing (*specify*):
 any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IB2005/000061

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	3
	No:	Claims	1,4-11
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-11
Industrial applicability (IA)	Yes:	Claims	1-11
	No:	Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/IB2005/000061

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. The following document is cited from the examiners knowledge:

D3: US 5 024 680 A

2. The present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of claims 1,2 and 4-11 is not new in the sense of Article 33(2) PCT for the following reasons:

Document D3 discloses in claim 1 a diamond grit comprising diamond particles coated with an inner layer of chromium carbide and an outer layer of a metal deposited on the inner layer. In example 1 the material of the outer layer is tungsten. According to claim 13 the outer tungsten layer can be deposited by physical vapour deposition.

The subject-matter of claims 1,2 and 4-11 is thus not new compared with D3.

3. The present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of claim 3 does not involve an inventive step in the sense of Article 33(3) PCT for the following reasons:

3.2 Replacing the metals for the outer coating disclosed in D3 by the specific alloys of present claim 3 can only be regarded as inventive, if this selection leads to an unexpected technical effect. However, no such effect is indicated in the application. Hence, no inventive step is present in the subject-matter of claim 3 over the disclosure of D3.